

Toraycon™ 1184G-A30 N1 PBT

TECHNICAL DATA

Product Description

High toughness, V-0, GF30%

Uses

- Electrical/Electronic Applications
- Switches
- Insulation
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PBT-I-GF30FR(17)<

Type

- PBT/Flame retardant reinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.63	g/cm ³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	0.90	%	
Flow : 3.00 mm	0.30	%	
Water Absorption ² (24 hr, 23°C)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	10000	MPa	ISO 527-1
Tensile Strength (23°C)	140	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	%	ISO 527-2
Flexural Modulus (23°C)	9500	MPa	ISO 178
Flexural Stress (23°C)	220	MPa	ISO 178
Coefficient of Friction - vs. Metal ³	0.15		Suzuki Method
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	9.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	65.0	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale, 23°C)	85		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	220	°C	ISO 75-2/B
1.8 MPa, Unannealed	207	°C	ISO 75-2/A
Coefficient of Linear Thermal Expansion (-30 to 100°C)	4.1	cm ³ -5/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.1E+15	ohms·m	IEC 60093
Electric Strength	14	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
23°C, 50 Hz	4.0		
23°C, 1 MHz	3.8		
Dissipation Factor			IEC 60250
23°C, 50 Hz	0.001		
23°C, 1 MHz	0.020		
Arc Resistance	134	sec	IEC 60950
Comparative Tracking Index (CTI)	PLC 2		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.38 mm)	V-0		UL 94

Additional Information	Nominal Value	Unit	Test Method
Bar Flow Length ⁴ (250°C, 1.00 mm)	136	mm	Internal Method

Notes

¹ 80x80x3mm
² in water
³ Without Lubrication
⁴ 93MPa

Toray Industries, Inc.

